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## Listing of Claims

1. (Currently Amended) An X-ray apparatus having
  - an X-ray source ~~(4)~~,
  - an X-ray detector ~~(5)~~,
  - a C-arm assembly ~~(1)~~ on which the X-ray source ~~(4)~~ and the X-ray detector ~~(5)~~ are arranged opposite one another, the C-arm assembly ~~(1)~~ being arranged to be rotatable about a propeller axis ~~(9)~~ and an axis of rotation ~~(11)~~, which axes extend perpendicularly to one another,
  - marker arrangements ~~(14, 15)~~ mounted on the X-ray source ~~(4)~~ and the X-ray detector ~~(5)~~ respectively, and
  - a camera arrangement ~~(12)~~ for detecting the marker arrangements ~~(14, 15)~~ to enable the positions of the X-ray source ~~(4)~~ and the X-ray detector ~~(5)~~ to be determined, the camera arrangement ~~(12)~~ being arranged on the C-arm assembly ~~(1)~~.
2. (Currently Amended) ~~An~~ The X-ray apparatus as claimed in claim 1, ~~characterized in that~~ wherein the camera arrangement ~~(12)~~ is arranged on a part ~~(3)~~ of the C-arm assembly ~~(1)~~ whose position does not change if the C-arm assembly ~~(1)~~ is rotated about the axis of rotation ~~(11)~~.
3. (Currently Amended) ~~An~~ The X-ray apparatus as claimed in claim 2, ~~characterized in that~~ wherein the camera arrangement ~~(12)~~ is arranged on the axis of revolution of the C-arm assembly ~~(1)~~ that extends along the propeller axis ~~(9)~~.
4. (Currently Amended) ~~An~~ The X-ray apparatus as claimed in claim 2 ~~or 3~~, ~~characterized in that~~ wherein the camera arrangement ~~(12)~~ is so arranged that, when the C-arm assembly ~~(1)~~ rotates about the propeller axis ~~(9)~~, it too performs the rotation.
5. (Currently Amended) ~~An~~ The X-ray apparatus as claimed in claim 1, ~~characterized in that~~ wherein the camera arrangement ~~(12)~~ is arranged on a part ~~(2)~~ of the C-arm assembly ~~(1)~~ whose position changes if the C-arm assembly ~~(1)~~ is rotated about the axis of rotation ~~(11)~~.

6. (Currently Amended) ~~An~~The X-ray apparatus as claimed in claim 5, ~~characterized in that wherein~~ the camera arrangement (12) is arranged on the C-arm (2), which C-arm (2) can be traversed about the axis of rotation (11) when the C-arm assembly (1) is rotated and carries the X-ray source (4) and the X-ray detector (5), the camera arrangement (12) being in particular arranged centrally on the C-arm (2) between the X-ray source (4) and the X-ray detector (5).

7. (Currently Amended) ~~An~~The X-ray apparatus as claimed in claim 5, ~~characterized in that wherein~~ a further marker arrangement (16) is mounted on the camera arrangement (12) and in that the X-ray apparatus also has a fixed camera arrangement (17) for detecting this marker arrangement (16), which latter is mounted on the camera arrangement (12) arranged on the C-arm assembly (1) to allow the position of this camera arrangement (12) to be determined.

8. (Currently Amended) ~~An~~The X-ray apparatus as claimed in claim 1, ~~characterized in that wherein~~ the camera arrangement (12) mounted on the C-arm assembly (1) has two cameras (121, 122), the first camera (121) detecting the marker arrangement (14) mounted on the X-ray source (4) and the second camera (122) detecting the marker arrangement (15) mounted on the X-ray detector (5).

9. (Currently Amended) ~~An~~The X-ray apparatus as claimed in claim 1, ~~characterized in that wherein~~ a computing unit is provided for the correction by calculation of the image data obtained, by reference to the data obtained relating to the positions of the X-ray source (4) and the X-ray detector (5).

10. (New) An x-ray apparatus comprising:  
an x-ray source including a first marker arrangement,  
an x-ray detector including a second marker arrangement,  
a c-arm assembly on which said x-ray source and said x-ray detector are  
mounted,  
a camera arrangement mounted to a portion of said c-arm assembly.

11. (New) The x-ray apparatus of claim 10, wherein the portion of the c-arm assembly to which the camera arrangement is mounted is fixed.

12. (New) The x-ray apparatus of claim 10, wherein the portion of the c-arm assembly to which the camera arrangement is mounted is moveable.

13. (New) The x-ray apparatus of claim 12 further comprising a second camera arrangement mounted to a fixed portion of said c-arm assembly.

14. (New) An x-ray apparatus comprising:

an x-ray source including a first marker;

an x-ray detector including a second marker;

a c-arm assembly on which said x-ray source and said x-ray detector are mounted;

a camera arrangement positioned on said x-ray apparatus such that the field of view between the camera arrangement and the first marker and the field of view between the camera arrangement and the second marker are not obstructed by a patient when said c-arm assembly moves relative to said patient.

15. (New) The x-ray apparatus of claim 14 further comprising a means for determining the position of said camera arrangement.